Appendix 3A-6: Annual Total Phosphorus Criteria Compliance Assessment for Water Year 2006 through Water Year 2010

Florida Department of Environmental Protection¹

¹ Florida Department of Environmental Protection, Division of Environmental Assessment and Restoration, Environmental Assessment and Support Program, Tallahassee, FL

Table 1. Annual total phosphorus criteria compliance assessment for the five-year period from Water Years 2006—2010 (April 1, 2005—May 30, 2010).

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
	Impacted	2006	LOXA101	8	14.5	Pass				
	Impacted	2006	LOXA105	8	15.5	Pass				
	Impacted	2006	LOXA124	11	10.6	Pass				
	Impacted	2006	LOXA130	11	14.8	Pass				
	Impacted	2006	LOXA137	12	13.6	Pass				
	Impacted	2006	LOXA140	9	11.8	Pass				
	Impacted	2006	X1	10	31.2	Fail				
	Impacted	2006	Z1	12	19.6	Fail				
	Impacted	2006		Annual Ne	twork Average		16.5	Fail		
	Impacted	2007	LOXA101	3	N/A (7.6)	N/A				
	Impacted	2007	LOXA105	2	N/A (14.7)	N/A				
	Impacted	2007	LOXA124	4	N/A (9.8)	N/A				
40	Impacted	2007	LOXA130	4	N/A (8.7)	N/A				
Refuge	Impacted	2007	LOXA137	4	N/A (7.6)	N/A				
Ref	Impacted	2007	LOXA140	2	N/A (7)	N/A				
	Impacted	2007	X1	7	31.8	Fail				
	Impacted	2007	Z1	9	35.9	Fail				
	Impacted	2007		Annual Ne	twork Average		33.9	Fail		
	Impacted	2008	LOXA101	9	14.0	Pass				
	Impacted	2008	LOXA105	9	14.9	Pass				
	Impacted	2008	LOXA124	10	13.0	Pass				
	Impacted	2008	LOXA130	11	11.1	Pass				
	Impacted	2008	LOXA137	11	9.4	Pass				
	Impacted	2008	LOXA140	8	7.8	Pass				
	Impacted	2008	X1	7	56.5	Fail				
	Impacted	2008	Z1	7	62.1	Fail				
	Impacted	2008		Annual Ne	twork Average		23.6	Fail		
	Impacted	2009	LOXA101	8	9.6	Pass				

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
	Impacted	2009	LOXA105	9	11.5	Pass				
	Impacted	2009	LOXA124	9	13.0	Pass				
	Impacted	2009	LOXA130	10	9.7	Pass				
	Impacted	2009	LOXA137	9	9.7	Pass				
	Impacted	2009	LOXA140	8	8.4	Pass				
	Impacted	2009	X1	10	61.0	Fail				
	Impacted	2009	Z1	12	27.8	Fail				
	Impacted	2009		Annual Ne	twork Average		18.8	Fail		
	Impacted	2010	LOXA101	11	13.0	Pass				
	Impacted	2010	LOXA105	11	12.1	Pass				
	Impacted	2010	LOXA124	11	12.5	Pass				
	Impacted	2010	LOXA130	11	10.3	Pass				
	Impacted	2010	LOXA137	11	10.7	Pass				
	Impacted	2010	LOXA140	11	10.8	Pass				
age .	Impacted	2010	X1	11	35.2	Fail				
Refuge	Impacted	2010	Z1	11	24.7	Fail				
ž	Impacted	2010		Annual Ne	twork Average		16.1	Fail		
	Impacted	2006-2010	I	Five-Year N	etwork Average				19.7	Fail
	Unimpacted	2006	LOX10	9	7.3	Pass				
	Unimpacted	2006	LOX11	10	7.1	Pass				
	Unimpacted	2006	LOX12	10	7.2	Pass				
	Unimpacted	2006	LOX13	8	7.5	Pass				
	Unimpacted	2006	LOX14	10	6.7	Pass				
	Unimpacted	2006	LOX15	10	7.5	Pass				
	Unimpacted	2006	LOX16	10	6.7	Pass				
	Unimpacted	2006	LOX3	4	N/A (7.3)	N/A				
	Unimpacted	2006	LOX4	10	8.0	Pass				
	Unimpacted	2006	LOX5	7	7.8	Pass				
	Unimpacted	2006	LOX6	10	6.0	Pass				
	Unimpacted	2006	LOX7	10	7.8	Pass				
	Unimpacted	2006	LOX8	10	8.1	Pass				

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
	Unimpacted	2006	LOX9	10	6.4	Pass				
	Unimpacted	2006	X4	12	9.1	Pass				
	Unimpacted	2006	LOXA108	6	9.8	Pass				
	Unimpacted	2006		Annual Ne	twork Average		7.5	Pass		
	Unimpacted	2007	LOX10	8	7.4	Pass				
	Unimpacted	2007	LOX11	10	6.6	Pass				
	Unimpacted	2007	LOX12	12	7.1	Pass				
	Unimpacted	2007	LOX13	10	7.3	Pass				
	Unimpacted	2007	LOX14	11	7.1	Pass				
	Unimpacted	2007	LOX15	11	7.3	Pass				
	Unimpacted	2007	LOX16	11	6.7	Pass				
	Unimpacted	2007	LOX3	4	N/A (10.4)	N/A				
	Unimpacted	2007	LOX4	8	9.7	Pass				
	Unimpacted	2007	LOX5	5	N/A (8.8)	N/A				
že	Unimpacted	2007	LOX6	10	6.8	Pass				
Refuge	Unimpacted	2007	LOX7	10	8.8	Pass				
%	Unimpacted	2007	LOX8	11	9.4	Pass				
	Unimpacted	2007	LOX9	7	7.8	Pass				
	Unimpacted	2007	X4	12	12.2	Pass				
	Unimpacted	2007	LOXA108	1	N/A (8)	N/A				
	Unimpacted	2007		Annual Ne	twork Average		8.0	Pass		
	Unimpacted	2008	LOX10	9	8.3	Pass				
	Unimpacted	2008	LOX11	11	7.4	Pass				
	Unimpacted	2008	LOX12	10	7.8	Pass				
	Unimpacted	2008	LOX13	10	7.2	Pass				
	Unimpacted	2008	LOX14	11	6.9	Pass				
	Unimpacted	2008	LOX15	10	7.5	Pass				
	Unimpacted	2008	LOX16	10	7.6	Pass				
	Unimpacted	2008	LOX3	10	8.7	Pass				
	Unimpacted	2008	LOX4	10	9.6	Pass				
	Unimpacted	2008	LOX5	10	7.9	Pass				

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
	Unimpacted	2008	LOX6	10	5.6	Pass				
	Unimpacted	2008	LOX7	10	7.8	Pass				
	Unimpacted	2008	LOX8	11	10.1	Pass				
	Unimpacted	2008	LOX9	10	8.0	Pass				
	Unimpacted	2008	X4	11	13.3	Pass				
	Unimpacted	2008	LOXA108	8	8.0	Pass				
	Unimpacted	2008		Annual Ne	twork Average		8.2	Pass		
	Unimpacted	2009	LOX10	8	8.0	Pass				
	Unimpacted	2009	LOX11	12	6.7	Pass				
	Unimpacted	2009	LOX12	12	6.8	Pass				
	Unimpacted	2009	LOX13	12	7.0	Pass				
	Unimpacted	2009	LOX14	12	6.4	Pass				
	Unimpacted	2009	LOX15	12	6.8	Pass				
	Unimpacted	2009	LOX16	12	7.7	Pass				
ege ege	Unimpacted	2009	LOX3	7	8.4	Pass				
Refuge	Unimpacted	2009	LOX4	8	9.5	Pass				
ž	Unimpacted	2009	LOX5	7	7.5	Pass				
	Unimpacted	2009	LOX6	10	7.6	Pass				
	Unimpacted	2009	LOX7	12	8.4	Pass				
	Unimpacted	2009	LOX8	12	11.3	Pass				
	Unimpacted	2009	LOX9	8	5.4	Pass				
	Unimpacted	2009	X4	11	11.4	Pass				
	Unimpacted	2009	LOXA108	8	9.3	Pass				
	Unimpacted	2009		Annual Ne	twork Average		8.0	Pass		
	Unimpacted	2010	LOX10	11	6.7	Pass				
	Unimpacted	2010	LOX11	11	6.2	Pass				
	Unimpacted	2010	LOX12	12	8.3	Pass				
	Unimpacted	2010	LOX13	11	6.3	Pass				
	Unimpacted	2010	LOX14	11	6.6	Pass				
	Unimpacted	2010	LOX15	11	6.6	Pass				
	Unimpacted	2010	LOX16	11	7.2	Pass				

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
	Unimpacted	2010	LOX3	9	8.1	Pass				
	Unimpacted	2010	LOX4	11	10.2	Pass				
	Unimpacted	2010	LOX5	9	7.7	Pass				
	Unimpacted	2010	LOX6	11	5.2	Pass				
age	Unimpacted	2010	LOX7	11	7.5	Pass				
Refuge	Unimpacted	2010	LOX8	11	9.8	Pass				
ž	Unimpacted	2010	LOX9	11	6.6	Pass				
	Unimpacted	2010	X4	11	8.9	Pass				
	Unimpacted	2010	LOXA108	11	8.0	Pass				
	Unimpacted	2010		Annual Ne	twork Average		7.5	Pass		
	Unimpacted	2006-2010	I	Five-Year N	etwork Average				7.9	Pass
	Impacted	2006	F1	18	46.4	Fail				
	Impacted	2006	F3	10	16.8	Fail				
	Impacted	2006	F4	16	15.3	Pass				
	Impacted	2006		Annual Ne	twork Average		26.2	Fail		
	Impacted	2007	404Z1	1	N/A (33)	N/A				
	Impacted	2007	CA224	1	N/A (7)	N/A				
	Impacted	2007	F1	10	43.4	Fail				
	Impacted	2007	F3	9	16.4	Fail				
~	Impacted	2007	F4	10	21.4	Fail				
A	Impacted	2007	N1	3	N/A (26.1)	N/A				
WCA-2	Impacted	2007		Annual Ne	twork Average		27.1	Fail		
	Impacted	2008	404Z1	8	27.0	Fail				
	Impacted	2008	CA223	6	25.9	Fail				
	Impacted	2008	CA224	9	8.4	Pass				
	Impacted	2008	F1	19	38.0	Fail				
	Impacted	2008	F3	10	19.3	Fail				
	Impacted	2008	F4	21	14.2	Pass				
	Impacted	2008	N1	9	19.9	Fail				
	Impacted	2008		Annual Ne	twork Average		21.8	Fail		
	Impacted	2009	404Z1	6	17.7	Fail				

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
	Impacted	2009	CA223	4	N/A (15.9)	N/A				
	Impacted	2009	CA224	7	5.8	Pass				
	Impacted	2009	F1	16	38.1	Fail				
	Impacted	2009	F3	10	21.1	Fail				
	Impacted	2009	F4	16	13.3	Pass				
	Impacted	2009	N1	7	13.9	Pass				
	Impacted	2009		Annual Ne	twork Average		18.3	Fail		
	Impacted	2010	404Z1	9	21.2	Fail				
	Impacted	2010	CA223	8	21.1	Fail				
	Impacted	2010	CA224	11	6.6	Pass				
	Impacted	2010	F1	11	23.2	Fail				
	Impacted	2010	F3	12	12.1	Pass				
	Impacted	2010	F4	11	10.7	Pass				
	Impacted	2010	N1	11	22.2	Fail				
7	Impacted	2010		Annual Ne	twork Average		16.7	Fail		
WCA-2	Impacted	2006-2010]	Five-Year Network Average					20.8	Fail
≥	Unimpacted	2006	CA29	16	6.5	Pass				
	Unimpacted	2006	E5	9	7.4	Pass				
	Unimpacted	2006	F5	9	8.5	Pass				
	Unimpacted	2006	U1	9	6.7	Pass				
	Unimpacted	2006	U3	8	5.7	Pass				
	Unimpacted	2006		Annual Ne	twork Average		7.0	Pass		
	Unimpacted	2007	404C2	4	N/A (13.8)	N/A				
	Unimpacted	2007	CA217	3	N/A (7)	N/A				
	Unimpacted	2007	CA222	3	N/A (6.5)	N/A				
	Unimpacted	2007	CA26	1	N/A (6)	N/A				
	Unimpacted	2007	CA29	10	8.9	Pass				
	Unimpacted	2007	E5	9	4.3	Pass				
	Unimpacted	2007	F5	9	6.7	Pass				
	Unimpacted	2007	U1	10	6.6	Pass				
	Unimpacted	2007	U3	8	5.4	Pass				

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
	Unimpacted	2007		Annual Ne	twork Average		6.4	Pass		
	Unimpacted	2008	404C2	8	8.5	Pass				
	Unimpacted	2008	CA217	10	6.3	Pass				
	Unimpacted	2008	CA222	10	5.8	Pass				
	Unimpacted	2008	CA26	9	5.3	Pass				
	Unimpacted	2008	CA29	15	6.2	Pass				
	Unimpacted	2008	E5	11	6.7	Pass				
	Unimpacted	2008	F5	11	8.7	Pass				
	Unimpacted	2008	U1	14	10.1	Pass				
	Unimpacted	2008	U3	12	7.6	Pass				
	Unimpacted	2008		Annual Ne	twork Average		7.2	Pass		
	Unimpacted	2009	404C2	7	8.4	Pass				
	Unimpacted	2009	CA217	8	4.9	Pass				
	Unimpacted	2009	CA222	7	4.4	Pass				
-5	Unimpacted	2009	CA26	8	4.8	Pass				
WCA-2	Unimpacted	2009	CA29	12	4.9	Pass				
≥	Unimpacted	2009	E5	10	5.7	Pass				
	Unimpacted	2009	F5	10	8.2	Pass				
	Unimpacted	2009	U1	12	8.1	Pass				
	Unimpacted	2009	U3	12	10.0	Pass				
	Unimpacted	2009		Annual Ne	twork Average		6.6	Pass		
	Unimpacted	2010	404C2	9	9.8	Pass				
	Unimpacted	2010	CA217	11	4.5	Pass				
	Unimpacted	2010	CA222	11	4.8	Pass				
	Unimpacted	2010	CA26	10	4.5	Pass				
	Unimpacted	2010	CA29	11	4.7	Pass				
	Unimpacted	2010	E5	14	6.0	Pass				
	Unimpacted	2010	F5	14	5.7	Pass				
	Unimpacted	2010	U1	14	6.0	Pass				
	Unimpacted	2010	U3	11	4.6	Pass				
	Unimpacted	2010		Annual Ne	twork Average		5.6	Pass		

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
WCA-2	Unimpacted	2006-2010]	- Five-Year N	etwork Average				6.5	Pass
	Impacted	2006	CA33	14	10.3	Pass				
	Impacted	2006	CA35	12	8.3	Pass				
	Impacted	2006	CA36	10	30.9	Fail				
	Impacted	2006		Annual Net	twork Average		16.5	Fail		
	Impacted	2007	CA314	4	N/A (5.9)	N/A				
	Impacted	2007	CA33	5	N/A (18.2)	N/A				
	Impacted	2007	CA35	4	N/A (10.1)	N/A				
	Impacted	2007	CA36	5	N/A (28.3)	N/A				
	Impacted	2007		Annual Ne	twork Average		NA	NA		
	Impacted	2008	CA314	11	7.3	Pass				
	Impacted	2008	CA324	1	N/A (14)	N/A				
	Impacted	2008	CA33	7	14.4	Pass				
	Impacted	2008	CA35	5	N/A (8.5)	N/A				
_	Impacted	2008	CA36	6	35.7	Fail				
WCA-3	Impacted	2008		Annual Ne	twork Average		19.1	Fail		
MC MC	Impacted	2009	CA314	12	4.3	Pass				
	Impacted	2009	CA324	6	11.1	Pass				
	Impacted	2009	CA33	10	8.7	Pass				
	Impacted	2009	CA35	8	6.9	Pass				
	Impacted	2009	CA36	12	23.3	Fail				
	Impacted	2009		Annual Ne	twork Average		10.8	Pass		
	Impacted	2010	CA314	12	4.5	Pass				
	Impacted	2010	CA324	5	N/A (12.5)	N/A				
	Impacted	2010	CA33	8	8.8	Pass				
	Impacted	2010	CA35	5	N/A (7.1)	N/A				
	Impacted	2010	CA36	8	23.6	Fail				
	Impacted	2010		Annual Net	twork Average		12.3	Fail		
	Impacted	2006-2010	I	Five-Year N	etwork Average				14.1	Fail
	Unimpacted	2006	3ASMESO	10	3.4	Pass				
	Unimpacted	2006	CA311	15	5.5	Pass				

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
	Unimpacted	2006	CA315	16	7.5	Pass				
	Unimpacted	2006	CA316	16	7.5	Pass				
	Unimpacted	2006	CA32	13	6.2	Pass				
	Unimpacted	2006	CA34	14	11.2	Pass				
	Unimpacted	2006	CA38	14	5.9	Pass				
	Unimpacted	2006	S345B6	8	6.3	Pass				
	Unimpacted	2006		Annual Ne	twork Average		6.7	Pass		
	Unimpacted	2007	3ASMESO	9	7.0	Pass				
	Unimpacted	2007	CA311	11	7.4	Pass				
	Unimpacted	2007	CA315	16	7.7	Pass				
	Unimpacted	2007	CA316	11	9.3	Pass				
	Unimpacted	2007	CA319	4	N/A (8.2)	N/A				
	Unimpacted	2007	CA32	6	9.4	Pass				
	Unimpacted	2007	CA325	1	N/A (8)	N/A				
Ą	Unimpacted	2007	CA34	5	N/A (12.6)	N/A				
WCA-3	Unimpacted	2007	CA38	6	6.1	Pass				
*	Unimpacted	2007	CA39	4	N/A (5.7)	N/A				
	Unimpacted	2007	CA3B1	3	N/A (5.5)	N/A				
	Unimpacted	2007	CA3B2	3	N/A (5)	N/A				
	Unimpacted	2007	S345B6	8	12.3	Pass				
	Unimpacted	2007		Annual Ne	twork Average		8.5	Pass		
	Unimpacted	2008	3ASMESO	12	7.4	Pass				
	Unimpacted	2008	CA311	15	6.8	Pass				
	Unimpacted	2008	CA315	15	8.0	Pass				
	Unimpacted	2008	CA316	13	10.8	Pass				
	Unimpacted	2008	CA319	10	6.8	Pass				
	Unimpacted	2008	CA32	7	7.5	Pass				
	Unimpacted	2008	CA325	6	5.6	Pass				
	Unimpacted	2008	CA34	7	15.2	Pass				
	Unimpacted	2008	CA38	11	6.7	Pass				
	Unimpacted	2008	CA39	10	6.8	Pass				

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
	Unimpacted	2008	CA3B1	10	6.0	Pass				
	Unimpacted	2008	CA3B2	8	7.6	Pass				
	Unimpacted	2008	S345B6	11	7.5	Pass				
	Unimpacted	2008		Annual Ne	twork Average		7.9	Pass		
	Unimpacted	2009	3ASMESO	12	4.6	Pass				
	Unimpacted	2009	CA311	15	4.9	Pass				
	Unimpacted	2009	CA315	16	5.0	Pass				
	Unimpacted	2009	CA316	16	6.4	Pass				
	Unimpacted	2009	CA319	12	4.5	Pass				
	Unimpacted	2009	CA32	12	5.9	Pass				
	Unimpacted	2009	CA325	7	4.6	Pass				
	Unimpacted	2009	CA34	13	7.2	Pass				
	Unimpacted	2009	CA38	13	4.9	Pass				
	Unimpacted	2009	CA39	11	4.8	Pass				
ϵ	Unimpacted	2009	CA3B1	10	3.6	Pass				
WCA-3	Unimpacted	2009	CA3B2	11	4.6	Pass				
≥	Unimpacted	2009	S345B6	12	4.7	Pass				
	Unimpacted	2009		Annual Ne	twork Average		5.1	Pass		
	Unimpacted	2010	3ASMESO	12	4.1	Pass				
	Unimpacted	2010	CA311	10	4.0	Pass				
	Unimpacted	2010	CA315	10	4.3	Pass				
	Unimpacted	2010	CA316	10	6.4	Pass				
	Unimpacted	2010	CA319	11	4.7	Pass				
	Unimpacted	2010	CA32	11	4.9	Pass				
	Unimpacted	2010	CA325	11	4.6	Pass				
	Unimpacted	2010	CA34	10	7.0	Pass				
	Unimpacted	2010	CA38	9	4.4	Pass				
	Unimpacted	2010	CA39	11	4.9	Pass				
	Unimpacted	2010	CA3B1	10	3.4	Pass				
	Unimpacted	2010	CA3B2	11	4.4	Pass				
	Unimpacted	2010	S345B6	11	3.6	Pass				

Area	Criterion Network	Water Year	Site	Sample Size (n)	Annual Site Geomean	≤15 Pass/ Fail	Network Annual Average Geomean	≤11 Pass/ Fail	Network Five-Year Average Geomean	≤10 Pass/ Fail
WCA-3	Unimpacted	2010		Annual Ne	twork Average		4.7	Pass		
WCA-3	Unimpacted	2006-2010	J	Five-Year N	etwork Average				6.3	Pass

N/A – Mean calculation not applicable

Refuge – Arthur R. Marshall Loxahatchee National Wildlife Refuge

WCA-2 – Water Conservation Area 2

WCA-3 – Water Conservation Area 3